

within the communications range is received, a record that includes information associated with the roaming device is created. Once the record is created, the static information is added to the record, and the record is stored in the database. In one embodiment, the static information is received from a source external to the transceiver device. In another embodiment the static information is information associated with a location of the transceiver device.

In accordance with yet another aspect of the present invention, a method of configuring a transceiver device includes positioning the transceiver device at a desired location, determining an address of the desired location, and storing the address in a memory field associated with the transceiver device. In one embodiment, the address includes at least one of a longitude, a latitude, and an altitude of the desired location. In another embodiment, the address is determined using a global positioning system receiver.

These and other advantages of the present invention will become apparent upon reading the following detailed descriptions and studying the various figures of the drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention may best be understood by reference to the following description taken in conjunction with the accompanying drawings in which:

Fig. 1 is a diagrammatic representation of a system which includes access points.

Fig. 2 is a diagrammatic representation of an access point in accordance with an embodiment of the present invention.

Fig. 3 is a process flow diagram which illustrates the steps associated with configuring an access point in accordance with an embodiment of the present invention.

Fig. 4 is a process flow diagram which illustrates the steps associated with the functioning of an access point with respect to establishing when a roaming device is

within range of the access point in accordance with an embodiment of the present invention.

Fig. 5 is a diagrammatic representation of an access point with an editable field which is used to store indices in accordance with another embodiment of the present invention.

DETAILED DESCRIPTION OF THE EMBODIMENTS

When a customer or user of a wireless local area network (LAN) roams within the wireless LAN, he or she may roam into and out of the communications range of different access points within the wireless LAN. Typically, at least one accounting or usage record which reflects a length of time a user has spent within range of a particular access point is generated. While information such as the amount of time spent within range of a particular access point is typically included in accounting records, information pertaining to physical locations of particular access points is generally not available in the accounting records. Such information, *i.e.*, information pertaining to a physical location of a particular access point, is generally not available for inclusion in accounting records due to the fact that the information recorded by an access point is generally predetermined by a manufacturer and does not include location information. In addition, the access point is not configured to enable a service provider who obtains the access point may to add information which is to be included in the recorded information.

An access point with a text editor which allows a service provider, *i.e.*, an owner of a LAN which includes the access point, to specify information that is to be included in accounting records provides the service provider with the ability to effectively store static information within the access point. Static information is generally information which is not updated during the operation of the access point, until an individual such as a system administrator chooses to overwrite the static information with new static information. Such static information, *e.g.*, information pertaining to the physical location of the access point, may be stored in an editable, non-volatile text field in a database or memory

associated with the access point. Allowing the service provider to provide static information to be stored on an access point enables the service provider to effectively customize accounting records, or usage records, associated with the access point. Customizing accounting records to specify a location of an access point that is accessed
5 by a roaming device enables the owner of the roaming device to more clearly ascertain which resources, *e.g.*, access points, he or she has made use of.

With reference to Fig. 2, the configuration of an access point, or a remote wireless transceiver device, which accepts text input, *e.g.*, data defined by a service provider, will
10 be described in accordance with an embodiment of the present invention. When an access point 202 is to be set up by an administrator 206 of a LAN that includes access point 202, administrator 206 may use a locator device 210 to establish a physical location of access point 202. By way of example, administrator 206 may use locator device 210 to establish a longitude, a latitude, and an altitude of access point 202. Locator device
15 210 may be substantially any suitable device, *e.g.*, a global positioning system (GPS) receiver, which enables a location of access point 202 to be identified.

Access point 202 includes a text editor 214 which is arranged to accept input or information from administrator 206. In one embodiment, text editor 214 may be a
20 software program, or computer code, which is arranged to be executed by a processor 230 and to accept text input from administrator 206 through the use of an input device such as a keypad or keyboard associated with access point 202 (not shown). The information entered using text editor 214 may be location information obtained through the use of locator device 210. It should be appreciated, however, that any suitable information may
25 be inputted into text editor 214. Suitable information may include, but is not limited to, information which may be used by access point 202 to determine the types of information which are to be included in records generated by record generator 218 of access point 202, and information which specifies an asset number assigned to access point 202.